JUMP START! 2.0 Pathway Brief

ARCHITECTURE & CONSTRUCTION

For incoming freshmen 2020–2021

OVERVIEW

The Architecture and Construction Jump Start 2.0 Pathway encompasses a vast array of careers all focused on the construction, design/pre-construction, and maintenance/operations of structures. These structures include residential neighborhoods, houses, and apartments; commercial buildings, warehouses, and offices; and public churches, schools, and recreational buildings. Pathway coursework will allow students to go directly into skilled trades as carpenters, plumbers, electricians, HVAC technicians or equipment operators. Architecture and Construction students will also be well prepared to continue their education to become professional architects, drafters, engineers, operators, and project managers.

COLLEGE AND CAREER CONNECTIONS

Finding high-wage career opportunities directly out of high school can be challenging. It typically requires advanced capstone credentials accompanied by work experience and/or apprenticeships in the field.

High School to Career	Community/Technical College to Career	University to Career
HVAC,Carpenter, Electrician, Plumber, Pipefitter, Welder (Helper or Apprentice)	Multi-Craft Project & Construction Management	Architect
Construction Materials Field Technician	Building Technology Specialist	Structural Engineer
Forklift Operator	Heavy Equipment and Crane and Tower Operator	Systems Safety Engineer

CAPSTONE CREDENTIALS

In order to graduate, Jump Start students must earn at least one credential from the options below.

Regional (Emerging)	Basic	Advanced
Career and Technical Certificate (LCTCS)*	Certificate of Technical Studies (LCTCS)*	Technical Diploma (LCTCS)*
Carpenter International Training Fund (CITF) Career Connections: Pre-Apprentice Core Skills	ABC Pelican Level 1	ABC Pelican Level 2
NCCER: • Construction Craft Laborer • Rigger • Scaffolding • Helper Modules	ADDA Certified Architectural Apprentice Drafter	Autodesk Inventor Certified User
OSHA: • OSHA 10 • OSHA 30	Autodesk AutoCAD Certified User	Carpenter International Training Fund (CITF) Career Connections: Level 2 OR 3
AutoDesk Revit	Basic Access Industrial Scaffolding	**NCCER Level 2 or above:** • Carpentry • Electrical • Heavy Equipment Operations • HVAC • Insulating • Millwright • Mobile Crane Operator • Pipefitting • Plumbing • Welding
	Carpenter International Training Fund (CITF) Career Connections: Level 1	Electrical Training ALLIANCE Interim Credential (etA): Levels 1-5
	Electrical Training ALLIANCE Interim Credential (etA): • Levels 1-3 • Level 4 • Level 5	EPA Section 608 Certification AND Air Conditioning, Electrical, OR Heat Employment Ready
	EPA Section 608 Certification	
	ESRI User Industry Based Certification	
	FAA Part 107: Small Unmanned Aircraft Operations	
	Louisiana Micro-Enterprise - Statewide	
	North America's Building Trades Unions Multi-Craft Core Curriculum (MC3)	
	NCCER: • Carpentry • Construction Technology • Electrical • Heavy Equipment Operations • HVAC • Insulating • Millwright • Mobile Crane Operator • Pipefitting • Plumbing • Welding	

**Aligned to pathway.*

K16 PATHWAY ALIGNMENT

UNIVERSAL DOCUMENTS

CDF ELIGIBLE COURSES • **JUMP START FUNDING** • **UNIVERSAL COURSE CODES**

Course Name	½ Credit Course Code	1 Credit Course Code	2 Credit Course Code	3 Credit Course Code
Advanced Electrical Electronics		310383		
Advanced Electricity/Electronics		110610		
Advanced Technical Drafting		110590		
Advanced Wood Technology		110120		
Ag Leadership		010364		
Ag Power Equipment		010446		
Agricultural Education Elective I	010500	010501	010502	010503
Agricultural Education Elective II	010510	010511	010512	010513
Agriscience Elective I	010401	010402	010403	
Agriscience Elective II	010411	010412	010413	010414
Agriscience II		010302		
Agriscience III		010303		
Agriscience IV		010304		
Air Conditioning/Refrigeration I		310100	310102	310103
Air Conditioning/Refrigeration II		310105	310112	310113
Air Conditioning/Refrigeration III		310114	310115	310116
Air Conditioning/Refrigeration IV		310117	310118	310119
Architectural Drafting		110580		
Auto Body Repair I		310200	310202	310203
Auto Body Repair II		310205	310212	310213
Auto Body Repair III		310214	310215	310216
Auto Body Repair IV		310217	310218	310219
Automotive Technician I		310300	310312	310313
Automotive Technician II		310305	310322	310323
Automotive Technician III		310306	310332	310333
Automotive Technician IV		310307	310342	310343
AWS Welding I		313100	313102	313103
AWS Welding II		313105	313106	313107
AWS Welding III		313108	313109	313110
AWS Welding IV		313111	313112	313113
Basic Electricity I		310400	310402	310403
Basic Electricity II		310410	310412	310413
Basic Electricity/Electronics		110600		
Basic SMAW		313120		
Basic Technical Drafting		110560		
Basic Wood Technology		110100		
Building Materials & Estimates		310620		
Business Math		040307		
Carpentry Calculations		310621		
Carpentry I		310600	310602	310603
Carpentry II		310605	310612	310613
CDF-Qualifying Pre-Apprenticeship I		080230	080231	
CDF-Qualifying Pre-Apprenticeship II		080233	080234	
CDF-Qualifying Pre-Apprenticeship III		080236	080237	
CDF-Qualifying Pre-Apprenticeship IV		080239	080240	
Chemistry		150401		
Civil Engineering & Architecture		110840		
CMAD Drafting		110570	110571	110572

Course Name	½ Credit Course Code	1 Credit Course Code	2 Credit Course Code	3 Credit Course Code
Computer Integrated Manufacturing		110850		
Computer Technology Literacy		040220		
Construction Math – Level 1		110108		
Construction Math – Level 2		110109		
Design, Blueprint Reading & Codes		310622		
Desktop Publishing		040207 OR 061114		
Digital Media I		080800	080802	080803
Drafting & Design Technology I		311300	311302	311303
Drafting & Design Technology II		311305	311312	311313
Electrician I		311400	311402	311403
Electrician II		311405	311412	311413
Engineering Design and Development		110860		
Engineering Design and Development (LSU Partnership)		110861		
Engineering Design I		080110	080111	
Engineering Design II		080120	080121	
Environmental Science		150310		
Environmental Science: AP Environmental Science		150311		
Environmental Science: DE - CEVS 1103 Environmental Science		150914		
Exterior Finishes		310627		
Fundamentals of Industrial Scaffolding		310631	310632	
General Technology Education		110010		
Geometry		160323		
GIS Entry Level 1		010103		
GIS Entry Level 2		010104		
G.M. Technician		313200	313202	313203
Grinder Assistant		110231		
Industrial Machines Shop I		311900	311902	311903
Industrial Machines Shop II		311905	311912	311913
Industrial Machines Shop III		311915	311916	311917
Industrial Machines Shop IV		311918	311919	311920
Interior Finishes		310628		
Introduction to Computational Thinking		061141		
Introduction to Computational Thinking for STEM: LSU Partnership		061140		
Introduction to Engineering Design	110799	110800		
Introduction to Engineering Design: LSU Partnership		110801		
Introduction to Hazardous Materials		311922		
Introduction to Remote Controlled Vehicle Technologies		110795		
Introduction to Social Media		080818		
Maintenance Assistant		313836		
Materials and Processes		110005		
NCCER Carpentry I		110701 OR 313300	110702 OR 313302	110703 OR 313303
NCCER Carpentry II		110706 OR 313305	110707 OR 313312	110708 OR 313313
NCCER Carpentry III		110700	110704	110705 OR 313317
NCCER Carpentry in Agriscience I		010601	010602	010603
NCCER Carpentry in Agriscience II		010604	010605	010606
NCCER Carpentry IV		110709	110710	110714
NCCER Construction Crafts		313726		

Course Name	½ Credit Course Code	1 Credit Course Code	2 Credit Course Code	3 Credit Course Code
NCCER Construction Technology		110110		
NCCER Core		311720		
NCCER Electrical I		110711 OR 313400	110712 OR 313402	110713 OR 313403
NCCER Electrical II		110716 OR 313405	110717 OR 313412	110718 OR 313413
NCCER Electrical III		313417	313418	313419
NCCER Electrical IV		313420	313421	313422
NCCER Electrical in Agriscience I		010701	010702	010703
NCCER Electrical in Agriscience II		010704	010705	010706
NCCER Insulating		313829	313830	
NCCER Millwright		313714	313740	313741
NCCER Mobile Crane Level I		313720		
NCCER Mobile Crane Level II		313721		
NCCER Pipefitter I		110731 OR 313600	110732 OR 313602	110733 OR 313603
NCCER Pipefitter II		110736 OR 313605	110737 OR 313612	110738 OR 313613
NCCER Pipefitter III		313617	313616	
NCCER Pipefitter IV		313620	313619	
NCCER Pipefitting in Agriscience I		010801	010802	010803
NCCER Pipefitting in Agriscience II		010804	010805	010806
NCCER Plumbing I		312500	312502	312503
NCCER Plumbing II		312505	312512	312513
NCCER Rigging I		313731	313732	313733
NCCER Rigging II		313734	313735	313736
NCCER Rigging III		313737	313738	313739
NCCER Scaffolding Level 1		321000	321001	321002
NCCER Welding in Agriscience I		010901	010902	010903
NCCER Welding in Agriscience II		010904	010905	010906
NCCER Welding Technology I		110741 OR 313700	110742 OR 313702	110743 OR 313703
NCCER Welding Technology II		110746 OR 313705	110747 OR 313712	110748 OR 313713
NCCER Welding Technology III		313621	313622	313623
NCCER Welding Technology IV		313624	313625	313626
Physics		150000		
Outdoor Power Equipment Technician		312300	312302	312303
PLTW Engineering Design and Development		110862		
PLTW Civil Engineering and Architecture		110841		
PLTW Introduction to Engineering Design		110802		
PLTW Principles of Engineering		080109		
Pre-apprenticeship I		080210	080208	
Pre-apprenticeship II		080211	080209	
Principles of Engineering		110810	110811	
Principles of Engineering: LSU Partnership		110864		
Project Management		310630		
Quality Controls		313727		
Sheet Metal I		312700	312702	312703
Sheet Metal II		312705	312712	312713
Site Layout		310623		
SMAW Pipe 5G		313123		
SMAW Pipe 6G		313124		
Woodworks		010435		